ATTACHMENT J36

NAS JRB Ft Worth Wastewater Collection System

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J36 NAS JRB Ft Worth Wastewater Collection System

J36.1 NAS JRB Ft Worth Overview

The mission of Naval Air Station Fort Worth Joint Reserve Base (NAS-JRB) is to provide a high quality training environment for active and Reserve components of all branches of the Armed Services. NAS-JRB is tasked with carrying out the Goldwater-Nichols Defense Reorganization Act of 1986, to improve the operability among all four military services; to reduce redundancy and overhead by developing joint doctrine and operate the procedures that create seamless functionality amongst host and tenant commands in base support and community service programs. The host command is the Commander Naval Air Reserve Force. Major tenants include:

- 301st Air Force Fighter Wing
- 136th Airlift Wing of the Texas Air National Guard
- Marine Air Group 41
- VFA 201
- VMFA 112
- VMGR 234
- VR 59
- Naval Reserve Readiness Command 11
- Commander Fleet Logistics Support Wing
- Headquarters 10th Air Force
- Army / Air Force Exchange Service
- Naval Reserve Intelligence Command
- Naval Reserve Security Group
- 14th Marine Regiment

Naval Air Station Ft. Worth Joint Reserve Base (NAS-JRB) is located in north-central Texas in Tarrant County, eight miles west of downtown Fort Worth. The main base comprises 1,871 acres, and contains 330 buildings, enclosing 2.7 million square feet. There is one main North-South 12,000 foot runway; there are 66 aircraft assigned to the base. The base falls within the jurisdiction of the cities of Fort Worth and White Settlement, and within an unincorporated portion of Tarrant County. The base is bordered by Lake Worth to the north, the West Fork of the Trinity River and Westworth Village to the east, Fort Worth to

the northeast and southeast, White Settlement to the west and southwest, and Air Force Plant #4 to the west.

The base has a total population of over 3,500 people including military and civilians. It has a combined payroll of $15 million per year.

A number of new facilities are planned for NAS JRB Ft Worth, and existing facilities will be upgraded or replaced to meet future mission requirements. Key projects planned for the Base are expected to increase the total square footage in Base buildings by approximately 2 percent over the next 5 years. The new planned facilities are:

New Bachelor Quarters

New Warehouse

New Administration Buildings

J36.2 Wastewater Collection System Description

J36.2.1 Wastewater Collection System Fixed Equipment Inventory

The NAS JRB Ft Worth wastewater collection system consists of all appurtenances physically connected to the collection system from the point of demarcation defined by the real estate instruments to point in which the collection system exits the base and current Government ownership ends. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, pipelines, lift station, and manholes. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the collection system. The Offeror shall base the proposal on site inspections, information in the bidder's library, other pertinent information, and to a lessor degree the following description. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

J36.2.1.1 Description

The existing wastewater collection system at the NAS-JRB Ft Worth as shown on the master engineering drawings consists of approximately 99,000 linear feet of gravity sewer lines, 36, 000 linear feet of service connections to buildings, 35,000 linear feet of non-potable water lines (fire water connections to buildings), and 98,000 linear feet of storm sewer line. Wastewater collection pipes range in size from 4 inches to 15 inches in diameter for the gravity sewer lines. Piping materials used in construction of the gravity sewer lines consist of mostly clay and concrete although there are a few areas throughout the base where PVC and ductile iron pipe are installed. There are approximately 282 sanitary manholes associated with the sanitary sewer collection system. The majority of the sanitary manholes are constructed of brick sections with open-pick-hole type covers. The newer manholes are constructed of pre-cast concrete sections. Wastewater flows by gravity, where it out falls to the City of Fort Worth's sanitary sewer system.

The wastewater stream is principally from domestic wastewater with smaller and/or intermittent contributions from non-domestic sources. The non-domestic flows associated

with aircraft and vehicle maintenance (lubrication, fueling and washing) and food service (galley, E-club, bowling alley) are pretreated at the source by means of oil / water separators and grease traps, respectively, prior to entering the collection system.

All wastewater is collected by means of service connection lines from the various sources served to a gravity collection system of sewers and manholes. A few buildings due to elevation differences require the aid of a small package lift station in order to transport the wastewater to the gravity collection system. The collection system is subdivided into ten (10) systems with each system having a single out fall to the City of Fort Worth's wastewater collection system.

Lift Stations and Forced Mains

The NAS Fort Worth wastewater collection system contains seven (7) lift stations. Information available concerning the lift stations is limited. Available data is summarized in Table 1, which lists capacities, sizes and principal features of pumps, and piping.

The NAS-JRB sanitary sewer system was designed as a separate sewer system to transport only wastewater flow exclusive of groundwater or storm water. Limited groundwater infiltration enters the sanitary sewer system based on observations made during television inspections of the sewer system conducted during December, 1994 by Southern Division Naval Facilities Command. The groundwater elevation at NAS-JRB varies across the site but is typically 10 to 12 feet below grade. The depth of the sanitary sewers at NAS-JRB typically range between 4 and 10 feet below grade which places them above the groundwater table in most cases.

Natural springs exist in the Fort Worth area with some located on base. One area where a spring is known to exist on base is along the north side of Arnold Avenue in front of Building 1501. During the televising, infiltration was observed in the sewer located on the south side of Arnold. It is possible that the infiltration is occurring as a result of the spring's influence on the sewer.

In addition to the system lift stations, there are two lift stations (Main Gate and East Gate) that are part of the Industrial Waste Treatment / Disposal Facility that collects and transports surface water flowing through the storm water collection system during dry weather only. During wet weather, the storm water is diverted away from the wet well and directed to the drainage ditch. Two surface water interceptor pumping stations have similar design and construction features.

The system currently includes 27 oil and water separators (OWS) that are either in operation or about to be brought on-line. All of the oil and water separators are believed to discharge into the sanitary sewer. The operating capacity when written on the plans is provided. If not available, the volume from the bottom of the separator to the invert of the discharge pipe was calculated and reported.

J36.2.1.2 Inventory

Table 1 provides a general listing of the major collection system fixed assets for the NAS JRB Ft Worth wastewater collection system included in the purchase. The system will be sold in a "as is, where is" condition without any warranty, representation, or obligation on the part of Government to make any alterations, repairs, or improvements. Ancillary equipment attached to, and necessary for, operating the system, though not specifically mentioned herein, is considered part of the purchased utility**.**

TABLE 1
Fixed Inventory
Wastewater Collection System Inventory NAS JRB Ft Worth

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Sanitary sewage main	4" – 15"	99,000	lf	unknown
Storm sewer	15" – 72"	98,000	lf	unknown
Sanitary sewage connection lines to bldgs	3" – 4"	36,000	lf	unknown
Non-potable water	6" – 8"	35,000	lf	unknown
			lf	unknown
			lf	unknown
			lf	unknown
Wastewater Lift/Pump Station		7	ea	unknown
Standard Sanitary Sewer Manholes	24	282	ea	unknown

PVC = polyvinyl chloride
lf = linear feet
ea = each

J36.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools Inventory

Table 2 lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

TABLE 2
Spare Parts
Wastewater Collection System NAS-JRB Ft Worth

Qty	Item	Make/Model	Description	Remarks
	None Identified			

TABLE 3
Specialized Equipment and Vehicles
Wastewater Collection System NAS-JRB Ft Worth

Description	Quantity	Location	Maker
None Identified			

J36.2.3 Wastewater System Manuals, Drawings, and Records Inventory

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 4
Manuals, Drawings, and Records
Wastewater Collection System NAS-JRB Ft Worth

Qty	Item	Description	Remarks
	None		

J36.3 Specific Service Requirements

Emergency Response Time Requirement:

The emergency response times required by NAS JRB represent a site specific requirement. The emergency response times as defined below are more stringent than the response times outlined in section C.8.2. of this solicitation.

In order to protect the NAS JRB mission integrity and to avoid a degradation of utility service the required response times for emergencies that occur during working hours are as follows:

For emergency requests received during normal duty hours (0700 - 1600) the Contractor shall respond immediately, the contractor shall have a representative knowledgeable of the system and the Service Interruption/Contingency Plan on the site of the emergency within 15 minutes during working hours. Additionally, repair crews appropriate to eliminate the condition must respond to the emergency site within 1 hour during working hours. Work will be continuous until the emergency condition is eliminated or downgraded and service is restored. All emergencies will be remedied or

downgraded to a non-emergency status within 24 hours. Non-Duty emergencies will be covered under section C.8.2 of this solicitation.

J36.4 Current Service Arrangement

The City of Ft Worth provides wastewater treatment for NAS JRB Ft Worth at the rate of approximately 0.6 million gallons per day (MGD) maximum and 16.6 million gallons (MG) per year.

As noted in Section J36.1, key projects planned for NAS JRB Ft Worth will increase the total square footage of buildings on Base by approximately 2 percent.

NAS JRB Ft Worth is located within the corporate limits of the City of Ft Worth. NAS JRB Ft Worth is included within a sewer Certificate of Public Convenience and Necessity held by the City of Ft Worth. As required by this contract, the Contractor shall demonstrate the ability to meet and shall establish the requirements to provide wastewater service to NAS JRB Ft Worth.

J36.5 Secondary Metering

There are currently no requirements for secondary metering of wastewater included in this contract. Any future wastewater secondary metering requested by the Government will be IAW C.3, Future Secondary Meters.

J36.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

   Name:
   Address:
   Phone number:

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

   Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

   Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:
Address:
Phone number:

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

   Name:
   Address:
   Phone number:

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to:

   Name:
   Address:
   Phone number:

J36.7 Infiltration and Inflow (I&I) Projects

IAW C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring I&I.

None

J36.8 Service Area

IAW Clause C.4, Service Area, the service area is defined as all areas within the NAS JRB Ft Worth boundaries.

J36.9 Off-Installation Sites

There are no off-installation sites associated with this scope.

J36.10 Specific Transition Requirements

IAW Clause C.17, Transition Plan, **Table 5** lists service connections and disconnections required upon transfer, and Table 6 lists the improvement projects required upon transfer of the NAS JRB Ft Worth wastewater collection system.

TABLE 5
Service Connections and Disconnections
Wastewater Collection System NAS JRB Ft Worth

Location	Description
None Identified	

TABLE 6
System Improvement Projects
Wastewater Collection System NAS JRB Ft Worth

Project Location	Project Description
	Approximately 15,000 LF of sanitary sewer pipe, ranging in size from 8"to 15" diameter, is in very poor condition and needs to be repaired and/or replaced.

J36.11 Government Recognized System Deficiencies

None Identified.